

**Louisville Metro Air Pollution Control District**  
**850 Barret Ave., Louisville, Kentucky 40204**  
**August 2, 2011**

**Title V Statement of Basis**

**Company:** Industrial Container Services - KY, LLC

**Plant Location:** 405 Industry Road, Louisville, Kentucky 40208-1692

**Date Application Received:** 07/22/2005

**Date Admin Complete:** 08/18/2005

**Date of Draft Permit:** 04/01/2011

**Date of Proposed Permit:** 06/14/2011

**District Engineer:** Shannon Clemons Hosey

**Permit No:** 139-97-TV (R1)

**Plant ID:** 0002

**SIC Code:** 7699

**NAICS:** 81130

**AFS:** 00002

**Introduction:**

This permit will be issued pursuant to: (1) Regulation 2.16, (2) Title 40 of the Code of Federal Regulations Part 70, and (3) Title V of the Clean Air Act Amendments of 1990. Its purpose is to identify and consolidate existing District and Federal air requirements and to provide methods of determining continued compliance with these requirements.

Jefferson County is classified as an attainment area for lead (Pb), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), 1 hr and 8 hr ozone (O<sub>3</sub>), and particulate matter less than 10 microns (PM<sub>10</sub>); and is a non-attainment area for particulate matter less than 2.5 microns (PM<sub>2.5</sub>).

**Application Type/Permit Activity:**

☐ Initial Issuance

☐ Permit Revision

☐ Administrative

☐ Minor

☐ Significant

☒ Permit Renewal

**Compliance Summary:**

☒ Compliance certification signed

☐ Compliance schedule included

☐ Source is out of compliance

☒ Source is operating in compliance

**I. Source Information**

1. **Product Description:** Drum reconditioning facility.
2. **Process Description:** Industrial Container Services - KY, LLC operates a drum reclamation furnace to remove any residual contents in the drums. The drums are then processed through an abrasive blast cleaning unit to remove any paint and rust. The drums are then painted in the surface coating operation.
3. **Site Determination:** There are no other facilities that are contiguous or adjacent and under common control.
4. **Emission Unit Summary:**

| Emission Unit | Equipment Description  |
|---------------|--|
| U1            | One (1) Drum reclamation furnace with waste heat recovery boiler and afterburner |
| U2            | One (1) Surface coating operation consisting of five paint booths and four ovens |
| U3            | One (1) Surface coating operation consisting of two paint booths and one oven    |
| U4            | One (1) 25.2 MMBtu/hr natural gas fired boiler                                   |
| U5            | Five (5) abrasive blast cleaning units with baghouses                            |
| U6            | One (1) Drum flushing operation with wet scrubber                                |

5. **Fugitive Sources:** There are fugitive VOC, HAP, and TAC emissions from the surface coating of steel drums.
6. **Permit Revisions:**

| Revision No. | Issue Date | Public Notice Date | Type    | Attachment No./Page No. | Description             |
|--------------|------------|--------------------|---------|-------------------------|-------------------------|
| N/A          | 1/24/2001  | 4/23/2000          | Initial | Entire Permit           | Initial Permit Issuance |

| Revision No. | Issue Date | Public Notice Date | Type    | Attachment No./Page No. | Description  |
|--------------|------------|--------------------|---------|-------------------------|--|
| R1           | 08/02/2011 | 04/01/2011         | Renewal | Entire Permit           | 5 year Renewal; Incorporate Construction Permits 121-03, 348-05, 446-08, 447-08, 82-06; 259-09; Change of Address; and Ownership/Name Change |

**7. Emission Summary:**

| Pollutant          | Actual Emissions (tpy) 2009 Data | Pollutant that triggered Major Source Status (based on PTE) |
|--------------------|----------------------------------|---|
| CO                 | 1.97                             | No  |
| NO <sub>x</sub>    | 2.74                             | No  |
| SO <sub>2</sub>    | 0.014                            | No  |
| PM <sub>10</sub>   | 15.42                            | Yes   |
| VOC                | 86.16                            | Yes   |
| Single HAP > 1 tpy | Ethyl Benzene<br>Xylene          | Yes   |
| Total HAPs         | 8.77                             | Yes   |

**8. Applicable Requirements:**

☐ PSD      ☐ NSPS      ☒ SIP      ☒ MACT  
☐ NSR      ☐ NESHAPS      ☒ District-Origin      ☐ Other

**9. Future MACT Requirements:** The source is not subject to any future MACT rules at this time.**10. Referenced Federal Regulations in Permit:**

40 CFR Part 63 Subpart A      General Provisions  
  
 40 CFR Part 63 Subpart M      National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products  
  
 40 CFR Part 64      Compliance Assurance Monitoring

## II. Regulatory Analysis

1. **Acid Rain Requirements:** The source is not subject to the Acid Rain Program.
2. **Stratospheric Ozone Protection Requirements:** Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. This source does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.
3. **Prevention of Accidental Releases 112(r):** The source does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.
4. **40 CFR Part 64 Applicability Determination:** Industrial Container Services - KY, LLC is not subject to 40 CFR Part 64 - *Compliance Assurance Monitoring for Major Stationary Sources* since the pre-control VOC emissions from the drum reclamation furnace are less than the major source threshold level of 100 tons per year.
5. **Basis of Regulation Applicability**

### a. Plant-wide

Industrial Container Services - KY, LLC is a major source for VOC, PM/PM<sub>10</sub>, single HAP, and total HAPs. Regulation 2.16 - *Title V Operating Permits* establishes requirements for major sources.

Regulations 5.01, 5.21, and 5.23 (STAR Program) establishes requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards.

| Regulation | Basis for Applicability  |
|------------|--|
| 5.01       | Regulation 5.01 establishes the requirements for Environmental Acceptability for Toxic Air Contaminants (TACs).    |
| 5.02       | Regulation 5.02 adopts certain national emission standards for hazardous air pollutants in 40 CFR Parts 61 and 63. |
| 6.07       | Regulation 6.07 establishes emission standards for indirect heat exchangers constructed prior to April 19, 1972.   |

| Regulation                | Basis for Applicability  |
|---------------------------|--|
| 6.09                      | Regulation 6.09 establishes PM and Opacity emission standards for processes that were installed prior to September 1, 1976.  |
| 6.31                      | Regulation 6.31 establishes VOC standards for affected facilities constructed prior to June 13, 1979 for the surface coating of miscellaneous metal parts.                   |
| 7.08                      | Regulation 7.08 establishes PM and Opacity emission standards for processes that were installed after September 1, 1976.   |
| 7.25                      | Regulation 7.25 establishes VOC standards for affected facilities constructed after June 13, 1979.   |
| 7.59                      | Regulation 7.59 establishes coating VOC content standards for affected facilities constructed on or after May 20, 1981 for the surface coating of miscellaneous metal parts. |
| 40 CFR Part 63, Subpart A | 40 CFR Part 63 General Provisions.   |
| 40 CFR 63, Subpart MMMM   | Subpart MMMM establishes organic HAP emission limitations for the surface coating of miscellaneous metal parts and products.   |
| 40 CFR Part 64            | 40 CFR Part 64 establishes enhanced monitoring of control devices with pre-control emissions greater than major source threshold levels.                                     |

**b. Emission Unit U1 - Drum Reclamation Furnace**

**i. Equipment:**

| Emission Point                    | Capacity     | Installation Date | Applicable Regulations |
|-----------------------------------|--------------|-------------------|------------------------|
| E1<br>Drum Reclamation<br>Furnace | 300 drums/hr | 1993              | 5.01, 7.08, 7.25       |

**ii. Standards/Operating Limits**

**a) VOC**

Regulation 7.25 establishes Best Available Control Technology (BACT) requirements for affected facilities with potential VOC emissions greater than 5 tons per year of VOC. The potential VOC emissions from the drum reclamation furnace are greater than 5 tons per year. The oxidizer/afterburner is considered BACT level of control for VOC with a control efficiency of 99.4% based on stack testing conducted in 2005.

a) **PM**

Regulation 7.08, section 3 establishes a pound per hour PM emission standard, based on the process weight rate. The PM limits are calculated per Regulation 7.08, section 3.1.2. The equation to calculate the PM emission limit is  $E = 3.59 * P^{0.62}$ , where E is the lb/hr allowable emission limit and P is the process weight rate expressed in tons/hr. The source is subject to a PM emission standard of 2.34 lb/hr. The source conducted stack testing in 2005 which resulted in a PM emission rate of 1.63 lb/hr.

c) **Opacity**

Regulation 7.08, section 3.1.1 establishes an opacity standard of 20%.

d) **NO<sub>x</sub>**

Regulation 7.08, section 4 establishes a NO<sub>x</sub> emission limit of 300 ppm by volume, expressed as NO<sub>2</sub>. The source conducted stack testing in 2005 which resulted in a NO<sub>x</sub> emission rate of 61 ppmv.

iii. **Monitoring and Record Keeping**a) **VOC**

Regulation 7.25 does not require any specific monitoring and record keeping requirements, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit. The source is required to monitor and maintain records of the combustion chamber temperature and the oxidizer/afterburner temperature to assure ongoing compliance with Regulation 7.25. Additionally, the source is required to monitor and maintain records of all periods of bypassing the oxidizer/afterburner.

b) **PM**

Regulation 7.08 does not require any specific monitoring and record keeping requirements for PM, however,

Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit. Based on the results of the stack testing conducted in 2005, there are no compliance monitoring requirements for PM.

c) **Opacity**

Regulation 7.08 does not require any specific monitoring and record keeping requirements for opacity, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit. The source is required to conduct monthly visible emission surveys to assure ongoing compliance with the opacity standard.

d) **NO<sub>x</sub>**

Regulation 7.08 does not require any specific monitoring and record keeping requirements for NO<sub>x</sub>, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. Based on the results of the stack testing conducted in 2005, there are no compliance monitoring requirements for NO<sub>x</sub>.

iv. **Reporting**

a) **VOC**

Regulation 7.25 does not require any specific reporting requirements for VOC, however, Regulation 2.16 section 4.1.9.3. requires sufficient reporting to assure ongoing compliance with the terms and conditions of the permit. The source is required to identify all periods of bypassing the oxidizer/afterburner while the drum reclamation furnace is in operation during a reporting period. The semi-annual compliance report shall include the date, duration (including start and stop time) of each bypass event, the total VOC emissions during each bypass event, summary information on the cause or reason for each bypass event, corrective action taken to minimize the extent and duration of each bypass event, and measures implemented to prevent reoccurrence of the situation that resulted in bypassing the

oxidizer/afterburner. The source is required to identify all periods of excursions during a reporting period. Excursion is defined as operating outside the established performance indicator range for the furnace combustion chamber temperature and the oxidizer/afterburner temperature. The semi-annual compliance report must include the date, duration (including the start and stop time), summary information on the cause or reason for each occurrence of operating outside the established minimum temperatures for the combustion chamber and afterburner, corrective action taken to correct the deviation and returning the operating parameters to the established minimum temperatures, and measures implemented to prevent reoccurrence of the situation that resulted in operating below the established minimum temperature values.

b) **PM**

There are no compliance reporting requirements for PM for Emission Unit U1.

c) **Opacity**

Regulation 7.08 does not require any specific reporting requirements for opacity, however, Regulation 2.16, section 4.1.9.3. requires sufficient reporting to assure ongoing compliance with the terms and conditions of the permit. The source is required to report any deviation from the requirement to perform the required monthly VE surveys or Method 9 tests, any deviation from the requirement to record the results of each monthly VE survey and Method 9 test performed, the number, date, and time of each VE Survey where visible emissions were observed and the results of the Method 9 test performed, identification of all periods of exceeding the opacity standard, and a description of any corrective action taken for each exceedance of an opacity standard.

d) **NO<sub>x</sub>**

There are no compliance reporting requirements for NO<sub>x</sub> for Emission Unit U1.

c. **Emission Unit U2 - Surface Coating Operation**



i. **Equipment:**

| <b>Emission Point</b>               | <b>Capacity</b> | <b>Installation Date</b> | <b>Applicable Regulations</b>                  |
|-------------------------------------|-----------------|--------------------------|--|
| E2Paint Booth55 and 30 gallon drums | 200 drums/hr    | 1973                     | 5.01, 6.09, 6.31, 40 CFR Part 63, Subpart MMMM |
| E5Paint BoothDrum Lining #1         | 170 drums/hr    | 1992                     | 5.01, 7.08, 7.59, 40 CFR Part 63, Subpart MMMM |
| E6Paint BoothDrum Lining #2         | 170 drums/hr    | 1992                     | 5.01, 7.08, 7.59, 40 CFR Part 63, Subpart MMMM |
| E9Paint BoothOverhead               | 170 drums/hr    | 1979                     | 5.01, 6.09, 6.31, 40 CFR Part 63, Subpart MMMM |
| E10Paint BoothDrum Lid              | 170 drums/hr    | 1986                     | 5.01, 7.08, 7.59, 40 CFR Part 63, Subpart MMMM |

ii. **Standards/Operating Limits**a) **VOC**

Regulations 6.31 and 7.59 establish a coating VOC content emission standard of 3.50 lb VOC/gal, as applied, for extreme performance coatings.

b) **PM**

Regulation 6.09 establishes a PM emission standard of 2.58 lb/hr from each paint booth and Regulation 7.08 establishes a PM emission standard of 2.34 lb/hr from each paint booth.

c) **Opacity**

Regulations 6.09 and 7.08 establish an opacity standard of 20%.

d) **HAP**

Emission Unit U2 is subject to 40 CFR Part 63, Subpart MMMM - *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Parts and Products* which establishes three options to demonstrate compliance with the organic HAP emission standards in accordance with 63.3891: Compliant Material Option, Emission Rate Without Add-on Controls Option, and Emission Rate With Add-on Controls Option. Industrial Container Services - KY, LLC identified the method of

compliance as Emission Rate Without Add-on Controls Option in their initial Subpart M notification to the District. All coatings used at this plant are classified as general use coatings. For existing general use coating affected sources, the organic HAP emission limit is 2.60 lb organic HAP per gallon coating solids used during each 12-month compliance period.

iii. **Monitoring and Record Keeping**

a) **VOC**

Regulations 6.31 and 7.59 establish requirements to monitor and maintain records of the VOC content of the coatings, as applied.

b) **PM**

Regulations 6.09 and 7.08 do not require any specific monitoring and record keeping requirements for PM, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit. The source is required to perform monthly visual inspections of each paint booth PM Filter System to ensure proper installment (i.e., proper alignment/placement, gaps, etc.) and replace filters as needed.

c) **Opacity**

Regulations 6.09 and 7.08 do not require any specific monitoring and record keeping requirements for opacity, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit. The source is required to perform monthly visible emission surveys for each PM Emission Point.

d) **HAP**

40 CFR Part 63, Subpart M establishes requirements to calculate and maintain records of the organic HAP emission limitation to demonstrate compliance with the 2.6 lb organic HAP per gallon coating solids during each

12-month compliance period for existing sources using general use coatings.

iv. **Reporting**

a) **VOC**

Regulations 6.31 and 7.59 do not require any specific reporting requirements for VOC, however, Regulation 2.16, section 4.1.9.3. requires sufficient reporting to assure ongoing compliance with the terms and conditions of the permit. The source must report all periods of exceeding the coating VOC content emission limitation during a reporting period. The semiannual compliance report must include the date, duration (including the start and stop time) of each VOC exceedance, the quantity of excess VOC emissions, summary information on the cause or reason for exceeding the coating VOC content emission limitation, corrective action taken to minimize the extent and duration of each VOC exceedance, and measures implemented to prevent reoccurrence of the situation that resulted in exceeding the coating VOC content emission limitation.

b) **PM**

Regulations 6.09 and 7.08 do not require any specific reporting requirements for PM, however, Regulation 2.16, section 4.1.9.3. requires sufficient reporting to assure ongoing compliance with the terms and conditions of the permit. The source is required to report all periods of failure to perform the monthly visual inspections of the PM Filter System for each paint booth during a reporting period. The semiannual compliance report shall include the date, cause or reason for failure to perform the PM Filter System inspection, and measures implemented to prevent reoccurrence of the situation that resulted in failure to perform the inspection. The source is required to report all periods of exceeding a PM emission standard during a reporting period. The semiannual compliance report must include the date, duration (including the start and stop time), quantity of excess PM emissions and the applicable PM emission standard, summary report that includes the cause or reason for exceeding a PM emission standard, corrective action taken to minimize the extent and duration of excess

PM emissions, and measures implemented to prevent reoccurrence of the situation that resulted exceeding a PM emission standard.

c) **Opacity**

Regulations 6.09 and 7.08 do not require any specific reporting requirements for opacity, however, Regulation 2.16, section 4.1.9.3. requires sufficient reporting to assure ongoing compliance with the terms and conditions of the permit. The source is required to report any deviation from the requirement to perform the required monthly VE surveys or Method 9 tests, any deviation from the requirement to record the results of each monthly VE survey and Method 9 test performed, the number, date, and time of each VE Survey where visible emissions were observed and the results of the Method 9 test performed, identification of all periods of exceeding the opacity standard, and a description of any corrective action taken for each exceedance of an opacity standard.

d) **HAP**

*No deviations.* If there were no deviations from the emission limitations, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.

*Deviations:* Emission rate without add-on controls option. If you used the emission rate without add-on controls option and there was a deviation from the applicable emission limit specified in the permit, the semiannual compliance report must contain the following information:

- 1) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit.
- 2) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The source must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of §63.3951; and if applicable, 12 of 24

the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4).

- 3) A statement of the cause of each deviation.

**d. Emission Unit U3 - Surface Coating Operation**

**i. Equipment:**

| Emission Point                | Capacity     | Installation Date | Applicable Regulations                         |
|-------------------------------|--------------|-------------------|--|
| E11Paint Booth16 gallon drums | 170 drums/hr | 1993              | 5.01, 7.08, 7.59, 40 CFR Part 63, Subpart Mmmm |
| E31Paint Booth85 gallon Drums | 20 drums/hr  | 2006              | 5.01, 7.08, 7.59, 40 CFR Part 63, Subpart Mmmm |

**ii. Standards/Operating Limits**

**a) VOC**

Regulation 7.59 establishes a coating VOC content emission standard of 3.50 lb VOC/gal, as applied, for extreme performance coatings.

**b) PM**

Regulation 7.08 establishes a PM emission standard of 2.34 lb/hr from each paint booth. The PM limits are calculated per Regulation 7.08, section 3.1.2. The equation to calculate the PM emission limit is  $E = 3.59 * P^{0.62}$ , where E is the lb/hr allowable emission limit and P is the process weight rate expressed in tons/hr.

**c) Opacity**

Regulation 7.08 establishes an opacity standard of 20%.

**d) HAP**

Emission Unit U2 is subject to 40 CFR Part 63, Subpart Mmmm - *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Parts and Products* which establishes three options to demonstrate compliance with the organic HAP emission standards in

accordance with 63.3891: Compliant Material Option, Emission Rate Without Add-on Controls Option, and Emission Rate With Add-on Controls Option. Industrial Container Services - KY, LLC identified the method of compliance as Emission Rate Without Add-on Controls Option in their initial Subpart M notification to the District. All coatings used at this plant are classified as general use coatings. For existing general use coating affected sources, the organic HAP emission limit is 2.60 lb organic HAP per gallon coating solids used during each 12-month compliance period.

iii. **Monitoring and Record Keeping**

a) **VOC**

- 1) Regulation 7.59 establishes requirements to monitor and maintain records of the VOC content of the coatings, as applied.
- 2) Regulation 7.59 require the source to maintain monthly records of the applicable regulation and section number applicable to the affected facility for which the records are being maintained, the application method and substrate type (metal, plastic, etc.), the amount and type of coatings (including catalyst and reducer for multi-component coatings) and solvent (including exempt compounds) used at each point of application during the averaging period, the VOC content as applied in each coating and solvent, the date, or usage record period, for each application of coating and solvent, the amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period, and the oven temperature. In this case, the compliance averaging period is each calendar month.

b) **PM**

Regulation 7.08 does not require any specific monitoring and record keeping requirements for PM, however, Regulation 2.16, section 4.1.9.1. requires sufficient

monitoring to assure ongoing compliance with the terms and conditions of the permit. The source is required to perform monthly visual inspections of each paint booth PM Filter System to ensure proper installment (i.e. proper alignment/placement, gaps, etc.) and replace filters as needed.

c) **Opacity**

- 1) Regulation 7.08 does not require any specific monitoring requirements and record keeping for opacity, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit. The source is required to perform monthly visible emission surveys for each PM Emission Point.
- 2) The source is required to maintain monthly records of the results of all visible emissions surveys and Method 9 tests performed. The records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

d) **HAP**

40 CFR Part 63, Subpart Mmmm establishes requirements to calculate and maintain records of the organic HAP emission limitation to demonstrate compliance with the 2.6 lb organic HAP per gallon coating solids during each 12-month compliance period for existing sources using general use coatings.

iv. **Reporting**

a) **VOC**

Regulation 7.59 does not require any specific reporting requirements for VOC, however, Regulation 2.16, section 4.1.9.3. requires sufficient reporting to assure ongoing compliance with the terms and conditions of the permit. The source must report all periods of exceeding the coating VOC content emission limitation during a reporting period. The semi-annual compliance report must include the date, duration (including the start and stop time) of each VOC exceedance, the quantity of excess VOC emissions, summary information on the cause or reason for exceeding the coating VOC content emission limitation, corrective action taken to minimize the extent and duration of each VOC exceedance, and measures implemented to prevent reoccurrence of the situation that resulted in exceeding the coating VOC content emission limitation

b) **PM**

Regulation 7.08 does not require any specific reporting requirements for PM, however, Regulation 2.16, section 4.1.9.3. requires sufficient reporting to assure ongoing compliance with the terms and conditions of the permit. The source is required to report all periods of failure to perform the monthly visual inspections of the PM Filter System for each paint booth during a reporting period. The semi-annual compliance report shall include the date, cause or reason for failure to perform the PM Filter System inspection, and measures implemented to prevent reoccurrence of the situation that resulted in failure to perform the inspection. Identification of all periods of exceeding a PM emission standard during a reporting period. The semi-annual compliance report must include the date, duration (including the start and stop time), quantity of excess PM emissions and the applicable PM emission standard, summary report that includes the cause or reason for exceeding a PM emission standard, corrective action taken to minimize the extent and duration of excess PM emissions, and measures implemented to prevent reoccurrence of the situation that resulted exceeding a PM emission standard.

c) **Opacity**

Regulation 7.08 does not require any specific reporting requirements for opacity, however, Regulation 2.16, section



4.1.9.3. requires sufficient reporting to assure ongoing compliance with the terms and conditions of the permit. The source is required to report any deviation from the requirement to perform the required monthly VE surveys or Method 9 tests, any deviation from the requirement to record the results of each monthly VE survey and Method 9 test performed, the number, date, and time of each VE Survey where visible emissions were observed and the results of the Method 9 test performed, identification of all periods of exceeding the opacity standard, and a description of any corrective action taken for each exceedance of an opacity standard.

d) **HAP**

*No deviations.* If there were no deviations from the emission limitations, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.

*Deviations:* Emission rate without add-on controls option. If you used the emission rate without add-on controls option and there was a deviation from the applicable emission limit specified in the permit, the semiannual compliance report must contain the following information:

- 1) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit.
- 2) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The source must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of §63.3951; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4).
- 3) A statement of the cause of each deviation.

e. **Emission Unit U4 - Natural Gas fired Boiler**

i. **Equipment:**

| Emission Point | Capacity       | Installation Date | Applicable Regulations |
|----------------|----------------|-------------------|------------------------|
| E13            | 25.2 MM Btu/hr | 1975              | 6.07                   |

ii. **Standards/Operating Limits**

a) **PM**

Regulation 6.07 establishes an emission standard of 0.45 lb PM per million BTU actual heat input capacity calculated as follows.

$$Y = 0.9634 X^{-0.2356}$$

Where:

Y = Allowable lb PM/MMBtu/hr actual heat input capacity

X = million btu per hour heat input capacity

b) **Opacity**

Regulation 6.07 establishes an opacity standard of 20% opacity, except during periods of building a new fire, cleaning the fire box, or blowing soot for a period or periods aggregating not more than ten minutes in any 60 minutes which are less than 40% opacity.

c) **SO<sub>2</sub>**

Regulation 6.07 establishes an emission standard of 1.0 lb SO<sub>2</sub> per million BTU actual heat input capacity.

iii. **Monitoring and Record Keeping**

a) **PM**

There are no monitoring and record keeping requirements for PM for Emission Unit U4. The potential uncontrolled PM emissions are below the applicable emission standard based on AP-42 emission factors.

b) **Opacity**

There are no monitoring and record keeping requirements for opacity for Emission Unit U4. The District has

determined that combusting natural gas will not cause an exceedance of the opacity standard. ICS is not required to perform periodic monitoring to demonstrate ongoing compliance with the opacity standard.

c) **SO<sub>2</sub>**

There are no monitoring and record keeping requirements for SO<sub>2</sub> for Emission Unit U4. The potential uncontrolled SO<sub>2</sub> emissions are below the applicable emission standard based on AP-42 emission factors.

iv. **Reporting**

a) **PM**

There are no reporting requirements for PM for Emission Unit U4.

b) **Opacity**

There are no reporting requirements for opacity for Emission Unit U4.

c) **SO<sub>2</sub>**

There are no reporting requirements for SO<sub>2</sub> for Emission Unit U4.

e. **Emission Unit U5 - Abrasive Blast Cleaning Units**

i. **Equipment:**

| <b>Emission Point</b>                        | <b>Capacity</b>        | <b>Installation Date</b> | <b>Applicable Regulations</b> |
|--|------------------------|--------------------------|-------------------------------|
| E14a First Stage Open Head (OH) Drum Blaster | 2100 lb steel shot/min | 1973                     | 5.01, 6.09, 40 CFR 64         |
| E14b Second Stage OH Drum Blaster            | 2100 lb steel shot/min | 1995                     | 5.01, 7.08, 40 CFR 64         |
| E14c Tight Head (TH) Drum Blaster            | 1250 lb steel shot/min | 1969                     | 5.01, 6.09, 40 CFR 64         |
| E14e Ring Blaster                            | 500 lb steel shot/min  | 1997                     | 5.01, 7.08, 40 CFR 64         |
| E14f Lid blaster                             | 320 lb steel shot/min  | 2009                     | 5.01, 7.08, 40 CFR 64         |

**ii. Standards/Operating Limits****a) PM/PM<sub>10</sub>**

The PM limits are calculated per Regulation 7.08, section 3.1.2. with this equation  $E = 3.59 * P^{0.62}$ , and also Regulation 6.09, section 3.2 with this equation  $E = 55 * P^{0.11} - 40$ . The E is the allowable lb/hr PM emission limit and P is the process weight rate expressed in tons/hr.

**b) Opacity**

Regulation 7.08, section 3.1.1 and 6.09, section 3.1 establishes an opacity standard of 20%.

**iii. Monitoring and Record Keeping****a) PM/PM<sub>10</sub>**

Regulation 7.08 and 6.09 do not require any specific monitoring and record keeping requirements for PM, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit. The source is required to monitor and maintain records of all periods of bypassing a baghouse while an associated abrasive blast cleaning unit is in use. Additionally, the source is required to perform monthly visual inspections of each baghouse. The source is subject to the requirements in 40 CFR Part 64 for the baghouses that control PM emissions from the abrasive blast cleaning units. The source is required to monitor the pressured drop and/or conduct visible emission surveys for each baghouse.

**b) Opacity**

Regulation 7.08 and 6.09 do not require any specific monitoring and record keeping requirements for opacity, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit. The source is required to conduct monthly visible emission surveys.

**iii. Reporting**

a) **PM/PM<sub>10</sub>**

Regulation 7.08 and 6.09 do not require any specific reporting requirements for PM, however, Regulation 2.16, section 5.2 requires sufficient reporting to assure ongoing compliance with the terms and conditions of the permit. The source is required to report all periods of bypassing a baghouse while the associated abrasive blast cleaning unit is in use including the emissions of PM during each bypass event.

b) **Opacity**

Regulation 7.08 does not require any specific reporting requirements for opacity, however, Regulation 2.16, section 5.2 requires sufficient reporting to assure ongoing compliance with the terms and conditions of the permit. The source is required to report any deviation from the requirement to perform the required monthly VE surveys or Method 9 tests, any deviation from the requirement to record the results of each monthly VE survey and Method 9 test performed, the number, date, and time of each VE Survey where visible emissions were observed and the results of the Method 9 test performed, identification of all periods of exceeding the opacity standard, and a description of any corrective action taken for each exceedance of an opacity standard specified in this permit.

f. **Emission Unit U6 - Drum Flushing Operation**i. **Equipment:**

| Emission Point | Capacity    | Installation Date | Applicable Regulations |
|----------------|-------------|-------------------|------------------------|
| E15            | 40 drums/hr | 1996              | 5.01                   |

ii. **Standards/Operating Limits****TAC**

Regulations 5.01, 5.21, and 5.23 establishes requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards.

iii. **Monitoring and Record Keeping**

**TAC**

The source is required to maintain records of each TAC contained in all materials used onsite and records of calculations of the pound per hour (lb/hr) and the pound per averaging period for each TAC emission from each piece of equipment to verify that the TACs are de minimis.

iv. **Reporting**

**TAC**

The source is required to submit a notification to submit notification to the District for any raw material change that introduces new TACs in this process equipment that would result in an increase in the quantity of a TAC above de minimis. If the TAC does not have an established BAC or de minimis value, the owner or operator shall calculate and report these values. If there were no periods of exceeding any TAC de minimis emission levels, the semiannual compliance report must include a statement that there were no exceedences of any TAC de minimis emission levels.

**II. Other Requirements**

1. **Temporary Sources:** The source did not request to operate any temporary facilities.
2. **Short Term Activities:** The source did not report any short term activities.
3. **Emissions Trading:** N/A
4. **Alternative Operating Scenarios:** The source did not request to operate under any alternative operating scenarios.
5. **Compliance Status:** Industrial Container Services, - KY, LLC is required to submit their annual Compliance Certification to the District on or before April 15<sup>th</sup> of each calendar year. As of the effective date of Permit 139-97-TV (R1), there are no compliance schedules in effect or progress reports required.
6. **Insignificant Activities**

| Equipment   | Quantity  | Basis for Exemption       |
|---|---|---------------------------|
| Storage tanks - diesel or fuel oil (not for sale)   | 1   | Regulation 2.02, 2.3.25   |
| Internal Combustion Engine Fixed or Mobile  | $\leq 15$   | Regulation 2.02, 2.2      |
| Brazing, soldering or welding   | 4   | Regulation 2.02, 2.3.4    |
| Soil or groundwater remediation (passive)   | 1   | Regulation 2.02, 2.3.20   |
| Operations Coating objects with grease  | 1   | Regulation 2.02, 2.3.9.1  |
| Emergency Relief Vents or ventilating systems   | 2 boiler vents  | Regulation 2.02, 2.3.10   |
| Heat-treating, soaking, case-hardening or surface conditioning of metal objects – using natural gas                           | 2 NG-fired dryers   | Regulation 2.02, 2.3.14   |
| Washing or Drying Fabricated metal  |   | Regulation 2.02, 2.3.15   |
| Residential/Domestic Equipment  | 2   | Regulation 2.02, 2.3.16   |
| Cold Solvent Parts Cleaner with Secondary Reservoir   | 1   | Regulation 2.02, 2.3.22   |
| Plastics handling, grinding and regrind storage   | 1<br>PTE $\leq 1.4$ tpy VOC   | Regulation 2.16, 1.22.1.2 |
| Bulk storage of non-VOC raw materials   | 1 AST for 50% NaOH  | Regulation 2.16, 1.22.1.2 |
| Storage of raw materials in drums and IBCs  | $\leq 24$ drums non-vol process or WWTP chems;<br>$\leq 60$ drums paint or solvent;<br>$\leq 10$ IBCs or $\leq 12$ drums oil or other maint products<br>$\leq 14$ drums haz waste | Regulation 2.16, 1.22.1.2 |
| Wastewater treatment operations/activities  | 1 WWTP<br>PTE $\leq 0.01$ SO <sub>x</sub>   | Regulation 2.16, 1.22.1.2 |
| Elementary neutralization of corrosive wastes in containers (neutralize high-pH NaOH waste w H <sub>2</sub> SO <sub>4</sub> ) | $\leq 10$ drums D002 waste<br>PTE $\leq 0.01$ SO <sub>x</sub>   | Regulation 2.16, 1.22.1.2 |

- 1) Insignificant activities identified in District Regulation 2.02 Section 2, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.
- 2) Insignificant activities identified in District Regulation 2.02 Section 2 shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.

- 3) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
- 4) The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16 section 4.3.5.3.6.
- 5) The owner or operator elected to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions to be reported on the annual emission inventory.